

Application No. 10/069,061
Attorney Docket No. 031780-0290585
Page 3

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in this application:

1. (Currently Amended) A process for insulating electrical components comprising the steps of:
 - (a) providing one or more electrical components selected from the group consisting of transformers, components with windings, and conducting wires;
 - (b) applying a coat of polymerizable casting and impregnating composition and/or lacquer in flowable form to the surface of the components to impregnate the coat onto the components, wherein the impregnation step is achieved through immersion, flooding, vacuum impregnation, vacuum pressure impregnation or trickling; and then
 - (c) curing the coated components ~~is~~ using near-infrared (NIR) radiation, said NIR radiation having a wavelength of from 500 nm to 1400 nm.
2. (Previously Presented) The process as claimed in claim 1, wherein the NIR radiation has a wavelength of from 750 nm to 1100 nm.
3. (Previously Presented) The process as claimed in claim 1, wherein the intensity maximum of the NIR radiation is situated within a wavelength range wherein the casting and impregnating composition of lacquer has an absorbance of between 20 and 80%.
4. (Previously Presented) The process as claimed in claim 1, wherein the NIR radiation is focused so that within the coat to be cured a temperature distribution adapted to the curing characteristics of said composition and/or lacquer is achieved.
5. (Previously Presented) The process as claimed in claim 1, wherein the coat is additionally cured by means of thermal heating with heated gases, by means of UV light and/or by means of electron beams.

Application No. 10/069,061
Attorney Docket No. 031780-0290585
Page 4

6. (Previously presented) The process as claimed in claim 1, wherein the components are impregnated at ambient temperature or in a preheated state or are heated during impregnation.

7. (Previously presented) The process as claimed in claim 6, wherein, following impregnation and before curing, the components are heated to the stage of partial gelling.

8. (Previously Presented) The process as claimed in claim 7, wherein, following partial gelling, the components are treated with the NIR radiation and then cured to completion thermally and/or with UV light.

9. (Previously Presented) The process as claimed in claim 1, wherein, prior to, simultaneously with or following thermal curing the components are treated with the NIR radiation and with UV radiation.

10. Cancelled.

11. (Currently Amended) The process as claimed in claim 1, wherein electrically conducting windings of the impregnated components are heated in the impregnating composition by applying current to an extent such that the desired amount of impregnation composition is gelled and fixed, in that after this gelling the component is removed from the impregnating composition, ungelled impregnating composition runs off and, if desired, is cooled and recycled, and in that the components are subsequently cured.

12. (Previously Presented) An apparatus comprising a coating means for applying a coat of polymerizable casting and impregnating composition and/or lacquer to the surface of the components and comprising a heating means for heating the components, wherein the heating means comprises at least one source for providing radiation having a wavelength of from 500 nm to 1400 nm.

Application No. 10/069,061
Attorney Docket No. 031780-0290585
Page 5

13. (Currently Amended) The apparatus as claimed in claim 12, wherein the heating means comprises an ~~and~~ electrical regulator of said source in order to adjust the wavelength and/or radiative energy acting on the substrates.

14. (Previously presented) The apparatus as claimed in claim 12, wherein it comprises optical filter means in order to adjust the wavelength and/or radiative energy acting on the substrates.